REMARKS/ARGUMENTS

The Office Action mailed June 23, 2005, has been received and reviewed. Claims 1 through 35 and 40 through 49 are currently pending in the application. Claims 6 through 18, 22, 23, 25 through 35, and 47 through 49 are withdrawn from consideration as being drawn to non-elected inventions. Claims 1 through 5, 19 through 21, 24, and 40 through 46 stand rejected. Applicants have amended claims 1, 40, and 42, and respectfully request reconsideration of the application as amended herein.

35 U.S.C. § 112 Claim Rejections

Claims 43 and 46 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants respectfully traverse this rejection, as hereinafter set forth.

Claim 43 recites "the solid propellant charge exhibits the lowest possible *steady state* burn rate when the axial thrust valve is fully open and the plurality of maneuver control valves are fully closed." (Emphasis added) Claim 43 does not recite that the opening of all maneuver control valves causes combustion termination, nor does claim 43 recite that the opening of the axial valve and only one maneuver control valve will not permit combustion. Rather claim 43 only recites that the lowest possible *steady state* burn rate is exhibited when the axial thrust valve is fully open and the plurality of maneuver control valves are fully closed. A rocket motor may exhibit either *transient or steady-state* behavior. All combustion is not steady-state. Therefore, claim 43 includes no contradictions, and the specification describes the subject matter in such a way as to enable one skilled in the art to make and/or use the invention. Further, the claim language does not represent a desired result, rather an embodiment of the invention.

Claim 46 is enabled by the specification at paragraph [0030] and [0029]. "Temperature as well as pressure sensors may be added to the pressure vessel to monitor these parameters..."(paragraph [0030]) "Maneuver control valves 28, 30, 36a, 36b, 38a and 38b may, as with axial thrust valve 10, be actuated by battery-powered actuators (not shown) powered by battery 46 or one or more other batteries. Alternatively, the valves, if electrically actuated, may

be powered by a fuel cell." (paragraph [0029]) One skilled in the art is familiar with the use of valve actuators to modulate flow area. Therefore, the specification enables one skilled in the art to use temperature and pressure sensors to monitor the grain, and modulate the flow area of a valve accordingly.

35 U.S.C. § 102 Rejections

Rejection Based on the "Advanced Carbon Fiber Reinforced" article by Fiber Materials, Inc.

35 U.S.C. 102(f)

Claims 1 through 5, 19-21, 24, and 40-46 stand rejected under 35 U.S.C. § 102(f) in view of the "Advanced Carbon Fiber Reinforced Silicon Carbide Technology for SM3 Divert and Attitude Control Systems" article, by Fiber Materials, Inc. (hereinafter the Fiber Materials document) for the stated reason that "applicant did not invent the claimed subject matter." Applicants respectfully traverse this rejection, as hereinafter set forth.

The Fiber Materials document was published on the internet on May 1, 2003. Fiber Materials, Inc. submitted the publication at the request of Dawnbreaker for the 2003 Virtual Acquisition Showcase. The showcase provides the Defense acquisition community with technology solutions developed by small businesses. The publication was submitted in response to a general request for information from small businesses. A link to the publication can be found on www.dawnbreaker.com/virtual2003/. A copy of this web page is attached as Exhibit A.

The design of the disclosed invention was not in response to a government or any other customer specification, and the invention as claimed does not read on any such specification.

Figure 1 of the Fiber Materials document does not disclose the claimed subject matter, and therefore cannot be the basis for a rejection that the applicant did not invent the claimed subject matter. Figure 1 of the Fiber Materials document is titled "Preliminary ATK Solid Divert and Attitude Control System Propulsion Unit." Alliant Techsystems Inc. (ATK) is the assignee of the present application.

Claim 1 recites, "A propulsion system, comprising: a pressure vessel containing a propellant; at least one axial thrust valve in communication with the pressure vessel and configured for selectively releasing gases generated by combustion of the propellant within the pressure vessel to directly provide axial thrust; and at least one maneuver control valve in

communication with the pressure vessel and configured for selectively releasing gases generated by combustion of the propellant within the pressure vessel to provide thrust for maneuvering." As expressed by the Examiner on page 4 of the outstanding Office Action, Figure 1 of the Fiber Materials document does not disclose an axial thrust valve. Therefore, the Fiber Materials document does not disclose an axial thrust valve in communication with a pressure vessel and a maneuver control valve in communication with the same pressure vessel. Thus, the Fiber Materials document fails to describe the invention as claimed in claim 1. Therefore, it is respectfully submitted that the rejection to claim 1 should be withdrawn.

Claims 3 and 4 are additionally allowable as the Fiber Materials document fails to describe a proportional valve.

Claim 5 is additionally allowable as the Fiber Materials document fails to describe a thruster located and oriented to provide axial thrust along a longitudinal axis.

Claim 19 is additionally allowable as the Fiber Materials document fails to describe at least one axial thrust valve and at least one maneuver control valve operable in combination for simultaneous opening to reduce pressure within the pressure vessel to a degree sufficient to terminate combustion of the at least one solid propellant grain.

Claim 24 is additionally allowable as the Fiber Materials document fails to describe a pressure vessel, an axial thrust valve, and a maneuver control valve disposed within a common housing.

Claim 40, as amended herein, recites "A solid propellant dual phase rocket motor comprising: a pressure vessel; a first solid pulse grain disposed within the pressure vessel and having at least one pulse igniter associated therewith; at least another solid pulse grain disposed within the pressure vessel, separated from the first pulse grain by a flame-inhibiting barrier and having at least one pulse igniter associated therewith; a plurality of *selectively operable proportional valves* in communication with the pressure vessel, configured for selectively releasing gases generated by combustion of the propellant within the pressure vessel, and having thrusters associated therewith." (Emphasis Added). The Fiber Materials document fails to describe the invention as claimed. Specifically, Figure 1 of the Fiber Materials document does not depict a plurality of selectively operable proportional valves in communication with a pressure vessel. "The mere fact that a claim recites the use of various components, each of which

can be argumentatively assumed to be old, does not provide a proper basis for a rejection under 35 U.S.C. 102(f)." *Ex parte Billottet*, 192 USPQ 413, 415 (Bd. App. 1976). Derivation requires complete conception by another and communication of that conception by any means to the party charged with derivation prior to any date on which it can be shown that the one charged with derivation possessed knowledge of the invention. *Kilbey v. Thiele*, 199 USPQ 290, 294 (Bd. Pat. Inter. 1978). MPEP 2137. The Fiber Materials document fails to describe the invention as claimed in claim 40. Therefore, it is respectfully submitted that the rejection to claim 40 should be withdrawn.

Claim 42 recites "A rocket motor comprising; a pressure vessel; a solid propellant charge disposed within the pressure vessel for generating combustion gases; a selectively operable axial thrust valve for release of the combustion gases from the pressure vessel; and a plurality of selectively operable maneuver control valves for release of the combustion gases from the pressure vessel." As discussed hereinabove, the Fiber Materials document fails to describe a selectively operable axial thrust valve. Thus, the Fiber Materials document fails to describe the invention as claimed in claim 42. Therefore, it is respectfully submitted that the rejection to claim 42 should be withdrawn.

Claim 43 is additionally allowable as the Fiber Materials document fails to describe a solid propellant charge which exhibits the lowest possible steady state burn rate when the axial thrust valve is fully open and the plurality of maneuver control valves are fully closed.

Claim 44 is additionally allowable as the Fiber Materials document fails to describe an axial thrust valve and a plurality of maneuver control valves sized to effect a rapid depressurization of the pressure vessel during combustion of the solid propellant charge to terminate combustion thereof when the axial thrust valve and the plurality of maneuver control valves are fully open.

Claim 45 is additionally allowable as the Fiber Materials document fails to describe proportional valves.

Claim 46 is additionally allowable as the Fiber Materials document fails to describe an axial thrust valve is configured for modulation of a flow area therethrough to compensate for temperature effects to provide substantially constant axial thrust.

Applicants respectfully submit that the Fiber Materials document is not available as a 35 U.S.C. § 102(b) reference against the present application because the Fiber Materials document was not published more than one year prior to the date of application for patent in the United States of the present invention. The present patent application was filed on December 5, 2003. The Fiber Materials document was published on the internet on May 1, 2003. In addition, attached to this Amendment are declarations pursuant to 37 C.F.R. § 1.131 signed by the Applicants. The Applicants respectfully submit that the attached declarations effectively show that the Applicants' invention was, at least, conceived prior to the publication of the Fiber Materials document. The attached declarations additionally reaffirm the Eric M. Rohrbaugh and Jeffrey M. White are the only inventors of the claimed subject matter.

35 U.S.C. § 102(b)

Anticipation Rejection Based on U.S. Patent No. 4,840,024 to McDonald

Claims 1 through 5, 19 through 21, 40 through 42, 44, and 45 stand rejected under 35 U.S.C. § 102(b) as being anticipated by McDonald (U.S. Patent No. 4,840,024). Applicants respectfully traverse this rejection, as hereinafter set forth.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

McDonald describes a solid propellant rocket motor 10 and a gas generator 50 located adjacent the first motor casing 12. A multiport gas generator control valve 58 controls the flow of gas from the gas generator 50. The flow of generated gas may be to an attitude control system 62, or to the diffuser 46 within the chamber 20 of the post boost motor 16. The post boost motor can be extinguished by diverting the *generated gas flow* to the attitude control system 62 or by terminating combustion of the gas generator propellant 52 within generator 50.

Claim 1 recites "A propulsion system, comprising: a pressure vessel containing a propellant; at least one axial thrust valve in communication with the pressure vessel and configured for selectively releasing gases generated by combustion of the propellant within the

pressure vessel to directly provide axial thrust; and at least one maneuver control valve in communication with the pressure vessel and configured for selectively releasing gases generated by combustion of the propellant within the pressure vessel to provide thrust for maneuvering."

McDonald fails to disclose both an axial thrust valve and maneuver control valve in communication with the pressure vessel, the axial thrust valve configured for selectively releasing gases generated by combustion of the propellant within the pressure vessel to provide axial thrust and the maneuver control valve configured for selectively releasing gases generated by combustion of the propellant within the pressure vessel to provide thrust. Rather, McDonald discloses a gas generator 50. The gases from the gas generator can be diverted by manifold system 60 to various discharge ports or thrusters that may be used to control attitude, roll or direction of the solid propellant rocket motor 10. Alternatively, the gases from the gas generator may flow to the diffuser 46 within the chamber 20 of the post boost motor 16. *When directed to the diffuser 46,* the gas generator flow ignites and reacts with the post boost motor extinguishable propellant to provide increased specific impulse. The gases used to control attitude, roll or direction do not pass through the post boost motor 16. Thus, the gases from the gas generator are either diverted by manifold system 60 to control attitude, roll or direction, or directed to the diffuser where the gases ignite and react with the post boost motor extinguishable propellant. Therefore, the gases from the gas generator do not directly provide axial thrust. Accordingly, McDonald fails to describe each and every element of claim 1. Therefore, it is respectfully submitted that the rejection to claim 1 should be withdrawn.

Claims 2-5, and 19-21 are each allowable, among other reasons, as depending from claim 1 which should be allowed.

Claim 3 is additionally allowable because McDonald fails to disclose an axial thrust valve configured as a proportional valve.

Claim 19 is additionally allowable because McDonald fails to disclose an axial thrust valve and a maneuver control valve operable in combination for simultaneous opening to reduce pressure within a pressure vessel to a degree sufficient to terminate combustion of the at least one solid propellant grain. The post boost motor propellant grain of McDonald may be extinguished by means of diverting the gas from the gas generator 50 to either the attitude control system 62 through the gas generator flow control valve 58 or by diversion of the generated gas flow through

a valve outlet port 66. McDonald fails to disclose involvement of an axial thrust valve to extinguish either the post boost motor propellant grain or the gas generator 50.

Claim 20 is additionally allowable because McDonald fails to disclose a plurality of solid propellant grains mutually separated by a flame-inhibiting barrier and at least one maneuver control valve configured for selectively releasing gases generated by combustion of the solid propellant grains to provide thrust for maneuvering. The attitude control system 62 of McDonald is driven by the gas generator 50, and not the boost motor 14 and the post boost motor 16.

Claim 40 recites "a solid propellant dual phase rocket motor comprising: a pressure vessel; a first solid pulse grain disposed within the pressure vessel and having at least one pulse igniter associated therewith; at least another solid pulse grain disposed within the pressure vessel, separated from the first pulse grain by a flame-inhibiting barrier and having at least one pulse igniter associated therewith; a plurality of selectively operable proportional valves in communication with the pressure vessel, configured for selectively releasing gases generated by combustion of the propellant within the pressure vessel, and having thrusters associated therewith."

McDonald fails to disclose a plurality of selectively operable proportional valves in communication with the pressure vessel, a first solid pulse grain and at least another solid pulse grain disposed within the pressure vessel. Rather, McDonald discloses an attitude control system 62, a flow of gas to the ACS provided by the gas generator 50. The products of the burning of the boost motor propellant grain 34 and the post boost motor propellant grain 42 are not released through the attitude control system or flow control valve 58. Flow control valve 58 provides a flow of gas from the gas generator 50 to the diffuser 46 within the chamber 20 of the post boost motor 16. Accordingly, McDonald fails to describe each and every element of claim 40. Therefore, it is respectfully submitted that the rejection to claim 40 should be withdrawn.

Claim 41 is allowable, among other reasons, as depending from claim 40 which should be allowed.

Claim 42 recites "a rocket motor comprising; a pressure vessel; a solid propellant charge disposed within the pressure vessel for generating combustion gases; a selectively operable axial thrust valve for release of the combustion gases from the pressure vessel to directly provide axial thrust; and a plurality of selectively operable maneuver control valves for release of the

combustion gases from the pressure vessel."

McDonald fails to disclose a selectively operable axial thrust valve for release of combustion gases from a pressure vessel to directly provide axial thrust and a plurality of selectively operable maneuver control valves for release of the combustion gases from the pressure vessel. As discussed hereinabove, the gases of the gas generator 50 of McDonald are not released to directly provide axial thrust, and the attitude control system of McDonald does not release the products of the burning of the boost motor propellant grain 34 and the post boost motor propellant grain 42.

Claims 44-45 are each allowable, among other reasons, as depending from claim 42 which should be allowed.

35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on U.S. Patent No. 4,840,024 to McDonald

Claim 24 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over McDonald (U.S. Patent No. 4,840,024). Applicants respectfully traverse this rejection, as hereinafter set forth.

M.P.E.P. 706.02(j) sets forth the standard for a Section 103(a) rejection:

> To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or suggest all the claim limitations.** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (Emphasis added).

Claim 24 is allowable, among other reasons, as depending from claim 1 which should be allowed.

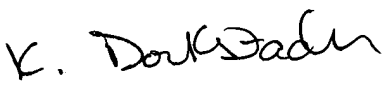
ENTRY OF AMENDMENTS

The amendments to claims 1, 40, and 42 above should be entered by the Examiner because the amendments are supported by the as-filed specification and drawings and do not add any new matter to the application.

CONCLUSION

Claims 1-35 and 40-49 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, he is respectfully invited to contact Applicants' undersigned attorney.

Respectfully submitted,



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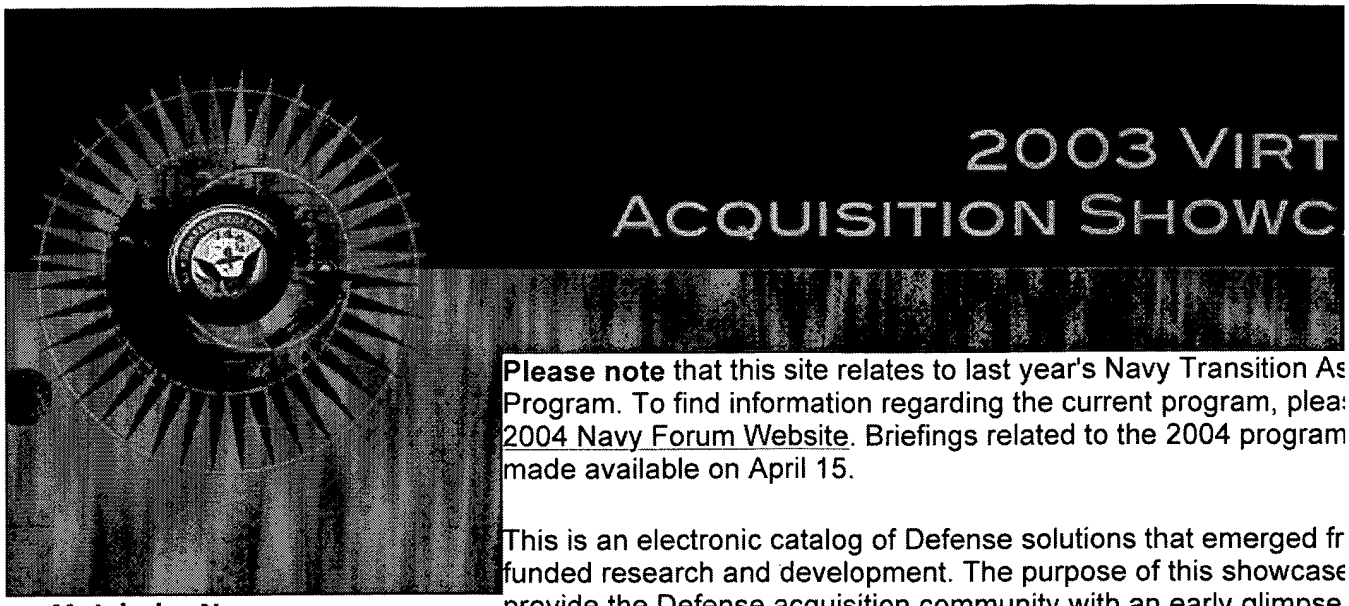
Document in ProLaw



Please note that this site relates to last year's Navy Transition As Program. To find information regarding the current program, plea: 2004 Navy Forum Website. Briefings related to the 2004 program made available on April 15.

This is an electronic catalog of Defense solutions that emerged fr funded research and development. The purpose of this showcase provide the Defense acquisition community with an early glimpse technology solutions that are being developed to address current through the Small Busienss Innovation Research (SBIR) program command or service may not have funded these projects, you ma your program could benefit from these technologies.

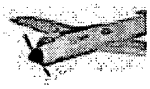
To make the information more accessible, we have developed an organized around 10 platforms. Select the platform of choice and forwarded to thumbnail descriptions of technologies and products by application and stage of development

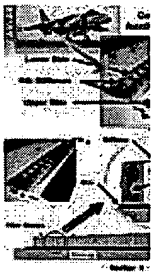
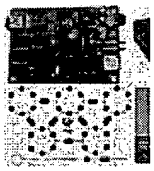
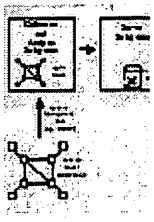
For more information, call **John Servo** at (585) 594-9281.

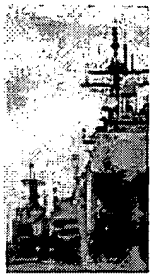
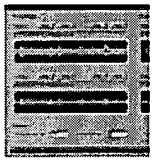
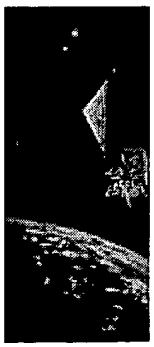
Matrix by Name
Matrix by Command
Matrix by Number

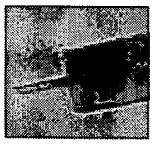
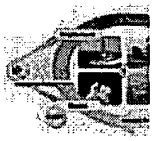
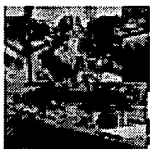
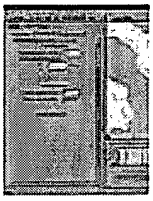
Application Areas
- **Aircraft**
- **Communications...**
- **Ground Support**
- **Missiles & Projectiles**
- **Power Generation**
- **Sensors...**
- **Submarines & ASW**
- **Surface Ships**
- **UAV**

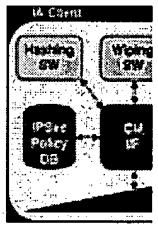
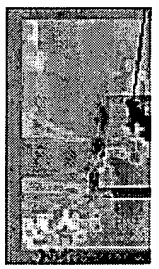
Matrix Sorted by Company Number

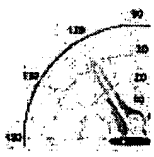
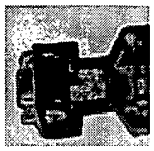
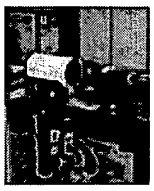
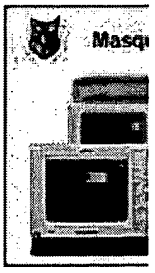
Company Number	Company Name	Application Area	Topic & Co
1	**Advanced Ceramic Research, Inc. (2)** Low-Cost, Computer Controlled Autonomous UAV Technology	UAV	 N01-T ONI
2	**Engineered Coatings, Inc.** Elimination of galling and fretting on metal	Aircraft	

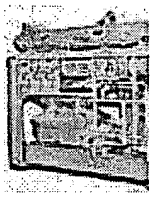
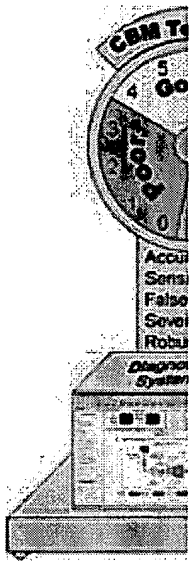
	interface surfaces.			N00-(NAVA
3	**Advanced Ceramic Research, Inc. (1)** Design and Fabrication of Low-Cost Composite Tooling Materials	Aircraft		NAVA N00-1
4	**Advanced Turbomachinery Solutions** Engine Seal which does not damage during reverse engine rotation.	Aircraft		N00-(NAVA
5	**Adept Systems, Inc.** Survivable information network infrastructure strengthens FORCEnet and its LonTalk protocol.	Communication...		N00-(ONI
6	**Architecture Technology Corporation** Network Analysis using Distributed Intelligent Agents (NADIA)	Surface Ships		N00-(SPAW

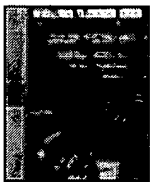
7	**Astron Wireless Technologies, Inc.** Low Cost RF Interference Canceller	Surface Ships		N00-(SPAW
8	**IPITEK** Fiber-optic cable plant to meet increasing electronic demands on aircraft.	Aircraft		N99-(NAVA
9	**Nomadics, Inc. CommNet** Adaptable, Digital, Hybrid Voice/Data Communication System	Surface Ships		N00T- › ONI
10	**PerfectWave Technologies, LLC** Improving voice communications, speech recognition, and speech authentication	Communication...		N00-(ONI
11	**Syntonics** PICO Advanced Clock for Precision GPS Holdover Timekeeping	Surface Ships		N01- SPAW

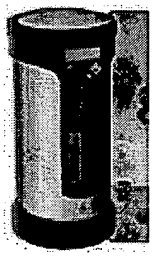
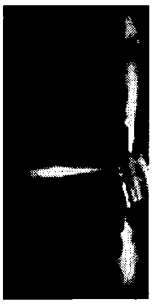
12	**Advanced Thermal and Environmental Concepts, Inc.** (ATEC) Distributed cooling for HTS components with ulta-low noise	Sensors...		N00-T ONI
13	**EDAptive Computing, Inc.** Characterize API for Real-Time Systems and Test Upon Processor Upgrades (CART)	Aircraft		N00-1 NAVA
14	**Isothermal Systems Research** Cooling method for dissipating heat in advanced electronics.	Aircraft		N92-1 NAVA
15	**21st Century Systems, Inc.** Consolidated Undersea Situational Awareness System (CUSAS)	Submarines & ASW		D98-(ONI
16	**Dynamic Technologies, Inc.** Automated Anomaly Detection Processor (AADP)	Surface Ships		N98-1 ONI
17	**Evidence Based Research, Inc.** Developing cognitive	Communication...		

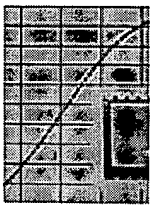
	guidelines to enhance collaborative team performance.			N00-(ONI
18	**Nova Engineering** Breakthroughs in Terrestrial Naval Communications	Surface Ships		N00-(NAVS
19	**Progeny Systems** COTS value-optimizing solutions for information security aboard Virginia Class.	Submarines & ASW		N98-1 NAVS
20	**Technology Promotion International, Inc.** Real-time automated tracking of logistics and maintenance information.	Ground Support		N00-(MARC
21	**Toyon Research, Inc.** GPS Intelligent Jammer Evaluation Tool (GIJET™)	Communication...		N00-(SPAW
22	**AETC, Inc.**	Submarines &		

			ASW	
		Clutter-Reduction Algorithm for Active Sonar		
				N99-1 NAVA
23		**Artis, LLC**	Surface Ships	
		Reducing Motion Sickness with MOCOVE (Motion-Coupled Virtual Environment)		N99-1 NAVA
24		**InterSpace, Inc.**	Aircraft	
		High Band-Width Scene Projector Drive Electronics		N089- NAVA
25		**MP Technologies, Inc. (1)**	Sensors...	
		Solar Blind AlGaN Ultraviolet Photodiodes by Lateral Epitaxial Overgrowth		N00-(ONI
26		**MP Technologies, Inc. (2)**	Sensors...	
		Uncooled Infrared Photon Detectors		N00-T ONI
27		**Vektrex Electronic Systems, Inc.**	Aircraft	
		Composite Replacement Instruments (CRI) for		

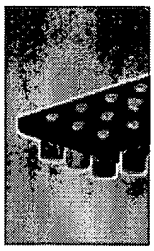
	Automatic Test Equipment (ATE) Systems			N99-2 NAVS
28	**Global Technology Connection, Inc.** Intelligent Prognostic for Diagnostic Systems. The intial application is for Shipboard VHAC (chillers).	Surface Ships		OSD9 OSI
29	**Impact Technologies, LLC (1)** Metrics for Diagnostic Technique Qualification and Validation	Surface Ships		OSD99 ONI
30	**Impact Technologies, LLC (2)** Prognostic Enhancements to Diagnostic Systems	Surface Ships		OSD99 OSI
31	**Knowledge Analysis Technologies** The Naval Knowledge Navigator	Surface Ships		N00-(ONI

32	**Logis-Tech**			
33	**Management Sciences, Inc.** Smart Wiring Systems for Avionic Safety and Reduced Maintenance Costs	Aircraft		N00-(NAV/
34	**Systems and Materials Research Corporation** Microwave NDT for Detection of Corrosion Under Paint	Aircraft		N99-(NAV/
35	**Thermal Wave Imaging, Inc.** Advanced Tools for Thermographic Nondestructive Inspection (NDI)	Aircraft		N97-(NAV/
36	**Dimensional Control Systems, Inc.** Software system to minimize labor, rework and cost in shipbuilding.	Surface Ships	[image m	N00-(ONI
37	**Custom Manufacturing and Engineering** Portable nitrogen charging system for hydro-pnuematic suspension units.	Ground Support		N00-(MARC

38	**Applied Research Associates, Inc.** Sterile Water for Injection Field (SWFI) Technology	Surface Ships		N99-T ONI
39	**InnovaTek** BioGuardian Air Sampler	Ground Support		CBD00 NAVS
40	**CompuSensor Technology Corporation** Integrated Missile Seeker Signal Processor for Autonomous Terminal Guidance	Missiles & Projectiles		N00-1 NAVA
41	**Fiber Materials, Inc.** Lower cost and lighter weight materials for the SM-3 kill vehicle.	Missiles & Projectiles		N96-2 NAVA
42	**Piezo Technology, Inc.** Improved Time	Missiles & Projectiles		

	and Frequency Standards for Gun-Launched Projectiles			N00-1 NAVS
43	**Quoin International, Inc.** Flywheel power and attitude control system to improve KKV (Kinetic Kill Vehicle) operating efficiency.	Missiles & Projectiles		BMDO 9 NAVS
44	**Veritay Technology, Inc.** Propulsion Improvements for Long Range Guns: Smart Cartridge concept for Improving the Performance of Navy Guns	Missiles & Projectiles		N00-(NAVS
45	**Mainstream Engineering Corporation** Ultra-Lightweight 2 kW Diesel-Powered, Electrical Generator	Power Generation		N00-(MARC
46	**Ocean Power Technologies, Inc.**	Power Generation		

Provide cost effective power from ocean waves for remote locations.



N00-1
ONI

47 **PC Krause and Associates, Inc.** Power Generation

Rapid, detailed simulation of large-scale electrical systems

N99-T
MARC

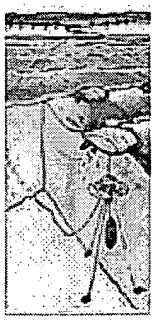
48 **QorTek, Inc.** Surface Ships

QorTek's Agile Drive-Enabled Magazine to Flight Deck Elevators

N99-1
NAVS

49 **Scientific Applications and Research Associates, Inc. (SARA)** Power Generation

Cost-effective, rapidly deployable ocean wave energy conversion (OWEC) system

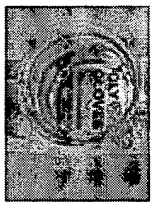


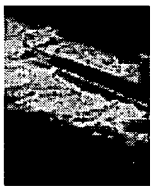
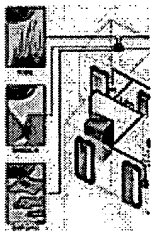
N99-1
ONI

50 **MARK Resources, Inc.** Aircraft

Identification of non-cooperative, moving targets using Inverse

N99-2
ONI

		Synthetic Aperture Radar (ISAR)		
51	**American Electronics, Inc.**	UAV		N98-(NAVA
	Airborne Mine Detection System			
52	**Art Anderson Associates, Inc.**	Surface Ships		N00-(ONI
	Discharge of cargo without a pier in SeaState 2 environments			
53	**Continuum Dynamics, Inc.**	Submarines & ASW		N00-(ONI
	Development of quiet turning controls using smart materials technology			
54	**Filtration Solutions, Inc.**	Surface Ships		N99-(NAVS
	Advanced Fuel Filtration Systems			
55	**NAVATEK, Ltd.**	Surface Ships		N98-1 ONI
	Lifting Body Hull Technology for Small Littoral Craft			
56	**Sonalysts, Inc.**	Surface Ships		
	Expeditionary Warfare training Support Module			

	(EWTSM)		 N01-SPAW
57	**Texas Research Institute Austin, Inc.** Water Based Hydraulic System	Submarines & ASW	 N99-2 NAVS
58	**Williams-Pyro, Inc.** "Smart doors" seal compartments in crisis situations under reduced manning.	Surface Ships	 N99-2 NAVS

Application Areas

Aircraft

Communications, Command, Control

Ground Support

Missiles & Projectiles

Power Generation

Sensors, Detectors, Processes

Submarines & ASW

Surface Ships

UAV

Matrices

Sorted by Company Name

Sorted by Navy Command
